

# **A SYSTEM AND METHOD FOR REAL-TIME WHITEBOARD CAPTURE AND PROCESSING**

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## **ABSTRACT OF THE DISCLOSURE**

A system that captures both whiteboard content and audio signals of a meeting using a video camera and records or transmits them in real-time. The Real-Time Whiteboard Capture captures pen strokes on whiteboards in real time using an off-the-shelf video camera. Unlike many existing tools, the RTWCS does not instrument the pens or the whiteboard. It analyzes the sequence of captured video images in real time, classifies the pixels into whiteboard background, pen strokes and foreground objects (e.g., people in front of the whiteboard), and extracts newly written pen strokes. This allows the RTWCS to transmit whiteboard contents using very low bandwidth to remote meeting participants. Combined with other teleconferencing tools such as voice conference and application sharing, the RTWCS becomes a powerful tool to share ideas during online meetings.